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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,865	05/30/2000	Brian Unitt	476-1922	1155
7590	12/31/2003		EXAMINER	
William M Lee Jr BARNES & THORNBURG P O Box 2786 Chicago, IL 60690-2786			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2633	
			DATE MAILED: 12/31/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/580,865	UNITT ET AL.
Examiner	Art Unit	
Hanh Phan	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on 30 May 2000.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 2,3,5,6,8,10,12,14-16,18,19,21 and 24-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 5,6,8,10,21,26 and 27 is/are allowed.

6)  Claim(s) 2,3,12,14,15,18,19,24 and 25 is/are rejected.

7)  Claim(s) 16 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a)  The translation of the foreign language provisional application has been received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)      4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_ .  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s)      6)  Other: \_\_\_\_\_

## DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 10/10/2003.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2, 3 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ota (US Patent No. 5,854,700).

Regarding claim 2, Ota discloses a passive optical coupler comprising a plurality of port pairs each port pair comprising an input port and a corresponding output port and wherein each input port is coupled to all output ports other than its corresponding output port (see Fig. 1, col. 3, lines 10-22).

Regarding claims 3 and 12, Ota discloses a communications access network comprising a passive optical coupler comprising a plurality of port pairs each port pair comprising an input port and a corresponding output port and wherein each input port is coupled to all output ports other than its corresponding output port (see Fig. 1, col. 3, lines 10-22).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 14, 15, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota (US Patent No. 5,854,700) in view of Hortensius et al (US Patent No. 5,917,629).

Regarding claims 14, 24 and 25 Ota differs from claims 14, 24 and 25 in that he does not specifically teach a transmitter arranged to transmit data on a first optical frequency; a transmission detector arranged to receive, on the first optical frequency, signals from a network indicative of a transmission by another subscriber station on the first frequency; a medium access logic unit arranged to prevent transmission on the first frequency while the transmission detector is detecting said signals from a network indicative of a transmission by another subscriber station on the first frequency. However, referring to figure 1, Hortensius teaches a transmitter (24) arranged to transmit data on a first optical frequency (i.e., wavelength  $\lambda 2$ ); a transmission detector (i.e., collision detector 30, Fig. 1) arranged to receive, on the first optical frequency, signals from a network indicative of a transmission by another subscriber station on the first frequency (col. 4, lines 34-45); a medium access logic unit (i.e., CSMA/CD protocol processor 28, Fig. 1) arranged to prevent transmission on the first frequency while the

transmission detector is detecting said signals from a network indicative of a transmission by another subscriber station on the first frequency (col. 5, lines 3-67 and col. 6, lines 1-18). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the transmitter arranged to transmit data on a first optical frequency; a transmission detector arranged to receive, on the first optical frequency, signals from a network indicative of a transmission by another subscriber station on the first frequency; a medium access logic unit arranged to prevent transmission on the first frequency while the transmission detector is detecting said signals from a network indicative of a transmission by another subscriber station on the first frequency as taught by Hortensius in the system of Ota. One of ordinary skill in the art would have been motivated to do this since Hortensius suggests in column 5, lines 3-67 and col. 6, lines 1-18 that using such a transmitter arranged to transmit data on a first optical frequency; a transmission detector arranged to receive, on the first optical frequency, signals from a network indicative of a transmission by another subscriber station on the first frequency; a medium access logic unit arranged to prevent transmission on the first frequency while the transmission detector is detecting said signals from a network indicative of a transmission by another subscriber station on the first frequency have advantage of allowing determining if a collision has occurred upon the network

Regarding claim 15, the combination of Ota and Hortensius teaches the receiver arranged to receive data on a second optical frequency (Fig. 1 of Hortensius).

6. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota (US Patent No. 5,854,700).

Regarding claims 18 and 19, it would have been obvious to obtain the transmission detector comprises a simple light detector and the light detector is a PIN diode in order to easy to detect a light wave and convert the light into the electricity and to increase the sensibility of the detector.

#### ***Allowable Subject Matter***

7. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 5, 6, 8, 10, 21, 26 and 27 are allowed.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 2, 3, 12, 14-16, 18 and 19 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Hanh Phan

Hanh Phan

12/24/2003